

AMENDMENTS TO THE CLAIMS

WE CLAIM:

1. (Currently amended) A method of computerized generation of a derivative value enhanced document from a patent document, comprising the steps of:

~~_____ processing the patent document, comprising:~~

(a) selecting a ~~segment~~claim section of the patent document;

(b) processing the selected ~~segment~~claim section, including:

(c) extracting claim dependency and text of claims from the claim section; ~~at least two portions of information from the selected segment of the document; and~~

(d) converting the extracted claim dependency into a graphical form, comprising a set of graphical elements, each element corresponding to an individual claim or a group of claims; ~~at least one of the extracted portions of information into at least one form;~~

(e) converting the extracted text of claims into a textual form, comprising a set of elements, each element being a text of an individual claim or a text of a group of claims; ~~combining the converted portions of information into a derivative segment of the patent document so as to provide value enhanced representation of the segment;~~

(f) forming a derivative claim section by combining the converted graphical and textual elements of the converted claim dependency and text of claims, and associating thereof with a computer program providing a user interactive selection of a

subset of elements in one of the graphical and textual forms,
and displaying said subset in the selected form along with the
related subset of elements according to the claim dependency in
the other form to a user; and

(g) forming the derivative document by combining the
derivative segment~~claim section~~ and one ofwith the patent
document ~~and/or~~ a part thereof of the patent document.

2. (Currently amended) A method as described in claim 1,
wherein the steps of ~~combining~~converting further the converted
~~portions~~comprises establishing links between the ~~portions of~~
~~information~~elements of the graphical and textual subsets
according to the transformed claim dependency.

3. (Canceled) ~~A method as described in claim 1, wherein the~~
~~step of converting comprises converting at least two of the~~
~~extracted portions of information into forms so that each form~~
~~comprises a subset of elements corresponding to sub-portions of~~
~~the extracted portion of information.~~

4. (Canceled) ~~A method as described in claim 3, wherein the~~
~~step of converting further comprises a step of selecting a~~
~~subset of elements for each of the sets of elements and~~
~~establishing correspondence between the elements of different~~
~~subsets.~~

5. (Currently amended) A method as described in claim 4~~1~~,
further comprising one or more of the following:

displaying the selected subsets of elements on a computer
screen; and

displaying the selected subsets of elements on a computer screen in combination with other elements of the sets.

6. (Canceled) A method as described in claim 1, wherein the step of converting the extracted portions of information comprises a step selected from the list consisting of:

~~converting the portions of information into at least two forms;~~

~~converting the portions of information so that at least one form of each portion is the same for all converted portions;~~

~~converting the portions so that at least one form of each portion differs from forms of other portions; and~~

~~converting the portions so that different portions are converted into different forms.~~

7. (Currently amended) A method as described in claim 1, wherein the step (e) of ~~converting the portions~~ comprises converting the portions into a format the form selected from the list consisting of ~~graphical, text~~ ASCII, HTML, SGML, XHTML, and XML, audio, video, and multi-media formats.

8. (Currently amended) A method as described in claim 1, wherein the step (g) of ~~forming the derivative document~~ comprises a step selected from the list consisting of:

forming the document so that the derivative ~~segment~~ claim section is replacing the ~~selected segment~~ claim section of the patent document;

forming the document so that the derivative ~~segment~~ claim section is supplementing the patent document;

forming the document so that the derivative ~~segment~~ claim section is supplemented by a ~~segment~~ part of the patent document; and

forming the document so that the derivative document is the derivative ~~segment~~claim section of the patent document.

9. (Original) A method as described in claim 1, further comprising a step of performing one or more of the following:

storing data obtained in at least one of the steps in a database;

sending data obtained in at least one of the steps over a network;

compressing data obtained in at least one of the steps;

displaying one of the derivative document and the derivative segment on a computer screen.

10. (Currently amended) A method as described in claim 1, wherein the step of ~~processing the document~~(b) comprises distributed processing of the patent document in a network environment performed by using processing power of more than one computer.

11. (Original) A method as described in claim 10, wherein the step of distributed processing comprises the steps of initial processing of the document performed on a server side and final processing performed on a client side.

12. (Original) A derivative document generated according to the method as described in claim 1.

13. (Currently amended) A method of computerized generation of a database stored in a memory, comprising the steps of:

(a) providing a patent document;

(b) performing the steps of the method as described in claim 1;

(c) storing data obtained in at least one of the steps of the step (b) in a database stored in the memory;

(d) repeating the steps (a) to (c) required number of times.

14. (Currently amended) A database stored in a memory and obtained according to the method as described in claim 13.

15. (Currently amended) A method of computerized generation of a derivative ~~segment~~claim ~~of~~section from a patent document, comprising the steps of:

~~—selecting a segment of the patent document;~~

~~—processing the selected segment, including:~~

~~extracting at least two portions of information~~

~~from the selected segment of the document; and~~

~~converting at least one of the extracted portions of information into at least one form; and~~

~~combining the converted portions of information into the derivative segment of the patent document so as to provide value enhanced representation of the segment.~~

(a) selecting a claim section of the patent document;

(b) processing the claim section, including:

(c) extracting claim dependency and text of claims from the claim section;

(d) converting the extracted claim dependency into a graphical form, comprising a set of graphical elements, each element corresponding to an individual claim or a group of claims;

(e) converting the extracted text of claims into a textual form, comprising a set of elements, each

element being a text of an individual claim or a text of a group of claims; and

(f) forming a derivative claim section by combining the converted graphical and textual elements of the converted claim dependency and text of claims, and associating thereof with a computer program providing a user interactive selection of a subset of elements in one of the graphical and textual forms, and displaying said subset in the selected form along with the related subset of elements according to the claim dependency in the other form to a user.

16. (Currently amended) A method as described in claim 15, wherein the steps of ~~combining the converted portions~~converting further comprises establishing links between the ~~portions of information~~ elements of the graphical and textual subsets according to the transformed claim dependency.

17. (Canceled) ~~— A method as described in claim 15, wherein the step of converting comprises converting at least two of the extracted portions of information into forms so that each form comprises a set of elements corresponding to sub-portions of the extracted portion of information.~~

18. (Canceled) ~~— A method as described in claim 17, wherein the step of converting further comprising a step of selecting a subset of elements for each of the sets of elements and establishing correspondence between the elements of different subsets.~~

19. (Currently amended) A method as described in claim ~~18~~16, further comprising one or more of the following:

displaying the selected subsets of elements on a computer screen; and

displaying the selected subsets of elements on a computer screen in combination with other elements. ~~of the sets.~~

20. (Canceled) A method as described in claim 15, wherein the step of converting the extracted portions of information comprises a step selected from the list consisting of:

~~converting the portions of information into at least two forms;~~

~~converting the portions of information so that at least one form of each portion is the same for all converted portions;~~

~~converting the portions so that at least one form of each portion differs from forms of other portions; and~~

~~converting the portions so that different portions are converted into different forms.~~

21. (Currently amended) A method as described in claim 15, wherein the step (e) ~~of converting the portions~~ comprises converting the portions into a ~~format~~ the form selected from the list consisting of ~~graphical, text~~ ASCII, HTML, SGML, XHTML, and XML, ~~audio, video, and multi-media~~ formats.

22. (Currently amended) A method as described in claim 15, wherein the step ~~of processing the segment~~ (b) comprises distributed processing of the ~~segment~~ claim section in a network environment performed by using processing power of two or more computers.

23. (Currently amended) A method as described in claim 22, wherein the step of distributed processing comprises the steps of initial processing of the ~~segment~~ claim section performed on a

server side and final processing of the ~~segment~~claim section performed on a client side.

24. (Currently amended) A derivative ~~segment~~claim section of a patent document generated according to the method as described in claim 15.

25. (Currently amended) A computerized system for generating a derivative ~~value-added~~ document from a patent document, comprising:

— a computer having a memory, said memory comprising:

(a) means for selecting a claim section of the patent document;

(b) means for processing the claim section into respective sets of elements in graphical and textual forms, and

(c) means for adding a new section to the patent document or to a part thereof to form the derivative document, the new section comprising a text of a computer program for interactive displaying the processed claim section or any part thereof in at least one of said forms, or a reference to a file where the text of said computer program resides, the computer program being executable in response to an event.~~means for processing the document, comprising:~~

~~— means for selecting a segment of the patent document;~~

~~— means for processing the selected segment, including:~~

~~means for extracting at least two portions of information from the selected segment of the document; and~~

~~means for converting at least one of the extracted portions of information into at least one form;~~

~~means for combining the converted portions of information into a derivative segment of the patent document; and~~

~~means for forming the derivative document by combining the derivative segment and one of the patent document and a part thereof.~~

26. (Original). A computerized system as described in claim 25, further comprising means for sending the derivative document over a network.

27.—(Currently amended) A computerized system as described in claim 25, wherein the means (b) for processing the patent document comprises means for distributed processing of the document in a network, wherein processing power of two or more computers is used.

28. (Canceled) ~~A method as described in claim 1, wherein the step of selecting the segment comprises selecting a claim section of the patent document.~~

29. (Canceled) ~~A method as described in claim 28, wherein the step of processing the selected segment comprises the following step, which is performed before the step of extracting portions of information:~~

~~—— when multiple dependent claims are present in the claim section, transforming multiple dependent claims into single dependent claims so that the number of single dependent claims generated from each multiple dependent claim is equal to the number of claims being referred to in the multiple dependent claim.——~~

30. (Canceled) ~~A method as described in claim 29, further comprising the step performing one of the following:~~

~~adding single dependent claims generated from multiple dependent claims to the end of original set of claims; and~~
~~inserting claims generated from a multiple dependent claim into original set of claims immediately after the multiple dependent claim, and~~
~~re-numbering of claims starting from the multiple dependent claim and to the end of claim section.~~

31. (Canceled) ~~A method as described in claim 29, wherein the step of converting comprises:~~
~~sorting single dependent claims by claim numbers to which claims refer to; and~~
~~interchanging positions of any two neighboring claims, the preceding claim and the succeeding claim, if they meet the following requirements:~~
~~both claims are dependent claims and refer to~~
~~different claims; and~~
~~succeeding claim does not refer to the preceding claim.~~

32. (Canceled) ~~A method as described in claim 28, wherein the step of extracting the information comprises extracting first and second portions of information, the portions of information being claim dependency and text of claims respectively.~~

33. (Canceled) ~~A method as described in claim 32, wherein the step of converting the portions of information comprises the steps of:~~
~~converting the first portion of information into a first form, the first form being represented in a graphical format, comprising a set of graphical elements, each element corresponding to an individual claim; and~~

~~converting the second portion of information into a second form, comprising a set of elements, each element being a text of an individual claim.~~

34. (Canceled) ~~A method as described in claim 33, wherein the step of converting the portions of information further comprises the steps of:~~

~~selecting a first subset of elements from the set of elements of the first format and a second subset of elements from the set of elements of the second format; and~~

~~establishing correspondence between the elements of the first and second subsets using claim dependency.~~

35. (Canceled) ~~A method as described in claim 34, wherein the step of selecting first and second subsets comprises customized selection of the corresponding elements.~~

36. (Canceled) ~~A method as described in claim 34, wherein the steps of selecting the subsets and establishing correspondence between the subsets are performed so as to provide one to one correspondence between the elements of the first and second subsets, wherein corresponding elements from the different subsets represent the same claim.~~

37. (Currently amended) A method as described in claim 35~~1~~, wherein the step of selecting~~on~~ of the subsets of elements comprises the step selected from the list consisting of:

selecting the ~~first~~ subset comprising only one element of the ~~first~~inane form, and displaying the selected subset in said one form with the related ~~the second~~ subset comprising the corresponding element of the ~~second~~other form;

selecting the ~~first~~ subset comprising only one element of ~~the first~~ in one form, and displaying the ~~second~~ selected subset in said one form along with the related subset in the other form comprising first and second elements ~~of the second form~~, wherein the first element corresponds to the selected element of the first form, and the second element is the element on which the first element refers to according to claim dependency;

selecting the ~~first~~ subset comprising elements of the ~~first~~ one form corresponding to independent claims only, and displaying the ~~second~~ selected subset in said one form along with the related subset in the other form comprising elements of the ~~second~~ other form corresponding to the selected elements of ~~the said one~~ first form;

selecting the ~~first~~ subset comprising elements ~~of in one~~ the ~~first~~ form corresponding to an independent claim and all the dependent claims referred thereto only, and displaying the selected ~~second~~ subset in said one form along with the related subset comprising elements ~~of in~~ the ~~second~~ other form corresponding to the selected elements ~~of the in said~~ first one form; and

selecting the first subset comprising an independent claim only in one form, and displaying the ~~second~~ selected subset in said one form along with the related subset comprising elements ~~of in~~ the ~~second~~ other form corresponding to the selected independent claim and all dependent claims referred thereto.

38. (Currently amended)— A method as described in claim 3437, further comprising one or more of the following:

displaying the selected subsets of elements on a computer screen; and

displaying the selected subsets of elements on a computer screen in combination with other elements of the sets.

39. (Currently amended) A computer program product for generating a derivative document from a patent document, comprising a computer usable medium having computer readable program code means embodied in said medium ÷

~~a computer usable medium having computer readable program code means embodied in said medium for causing generation of the derivative document, said computer program product having:~~

~~computer readable program code means for causing said computer to perform the steps of the method as described in claim 1.; and~~

~~computer readable program code means for causing said computer to perform one or more of the following:~~

~~storing data obtained in at least one of the steps of the method as described in claim 1 in a database;~~

~~retrieving data obtained in at least one of the steps of the method as described in claim 1 from a database;~~

~~— sending data obtained in at least one of the steps of the method as described on claim 1 over a network; and~~

~~displaying the derivative document on a computer screen.~~

40. (Currently amended) A computer program product for generating a derivative ~~segment~~claim section of a patent document, comprising a computer usable medium having computer readable program code means embodied in said medium for causing said computer to perform the steps of the method as described in claim 15.÷

~~a computer usable medium having computer readable program code means embodied in said medium for causing generation of the derivative section, said computer program product having:~~

~~computer readable program code means for causing said computer to perform the steps of the method as described in claim 15; and~~

~~computer readable program code means for causing said computer to perform one or more of the following:~~

~~storing data obtained in at least one of the steps of the method as described in claim 15 in a database;~~

~~retrieving data obtained in at least one of the steps of the method as described in claim 15 from a database;~~

~~— sending data obtained in at least one of the steps of the method as described in claim 15 over a network; and~~

~~displaying the derivative section on a computer screen.~~

41. (New) A method as described in claim 1, wherein the step (b) further comprises:

(i) transforming multiple dependent claims into single dependent claims;

(ii) sorting the transformed claims by claim numbers to which the claims refer to;

(iii) interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:

both claims are dependent claims and refer to different claims; and

succeeding claim does not refer to the preceding claim;

wherein the steps (i) to (iii) are performed before the step (c) of extracting.

42. (New) A method as described in claim 1, wherein:

the step (c) comprises extracting claim dependency and text of claims from the interchanged claims;

the step (f) comprises combining and displaying the converted graphical and textual elements in the order obtained after the step (iii) of interchanging and according to the transformed claim dependency.

43. (New) A method as described in claim 41, wherein the step (i) further comprises one of the following:

adding single dependent claims generated from multiple dependent claims to the end of original set of claims; and

inserting claims generated from a multiple dependent claim into original set of claims immediately after the multiple dependent claim, followed by re-numbering of claims starting from the multiple dependent claim and to the end of claim section.

44. (New) A derivative patent document, comprising:

(i) a converted claim section, in which claim dependency and text of claims have been extracted and converted into elements in graphical and textual forms respectively and according to claim dependency; and

(ii) a text of a computer program for interactive displaying the converted claims of the claim section or any part thereof to a user in at least one of said forms, or a reference to a file where the text of said program resides, the computer program being executable in response to an event.

45. (New) A derivative patent document as described in claim 44, wherein said transformed claims are sorted by claim numbers to which the claims refer to, and the positions of any two neighboring sorted claims, the preceding claim and the

succeeding claim, are interchanged if they meet the following requirements:

both claims are dependent claims and refer to different claims; and

succeeding claim does not refer to the preceding claim;

and

wherein the interactive displaying is performed for the transformed, sorted and interchanged claims.

46. (New) A computer database stored in a memory, the database storing derivative patent documents of claim 44.

47. (New) A derivative patent document as described in claim 44, the derivative document being presented in a web compatible form such that to be recognized by a browser.

48. (New) A method as described in claim 15, wherein the step (b) further comprises:

(i) transforming multiple dependent claims into single dependent claims;

(ii) sorting the transformed claims by claim numbers to which the claims refer to;

(iii) interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:

both claims are dependent claims and refer to different claims; and

succeeding claim does not refer to the preceding claim;

wherein the steps (i) to (iii) are performed before the step (c) of extracting.

49. (New) A method as described in claim 48, wherein:
the step (c) comprises extracting claim dependency and text
of claims from the interchanged claims;
the step (f) comprises combining and displaying the
converted graphical and textual elements in the order obtained
after the step (iii) of interchanging and according to the
transformed claim dependency.

50. (New) A system as described in claim 25, wherein the
means (b) comprises:

(i) means for transforming multiple dependent claims into
single dependent claims;

(ii) means for sorting the transformed claims by claim
numbers to which the claims refer to;

(iii) means for interchanging positions of any two
neighboring sorted claims, the preceding claim and the
succeeding claim, if they meet the following requirements:

both claims are dependent claims and refer to
different claims; and
succeeding claim does not refer to the preceding claim.

51. (New) A computerized system for generating a derivative
document from a patent document, comprising a computer having a
memory, said memory comprising:

(a) means for selecting a claim section of the patent
document;

(b) means for processing the claim section, including:

(c) means for extracting claim dependency and text of
claims from the interchanged claims;

(d) means for converting the extracted claim
dependency into a graphical form, comprising a set of

graphical elements, each element corresponding to an individual claim or a group of claims;

(e) means for converting the extracted text of claims into a textual form, comprising a set of elements, each element being a text of an individual claim or a text of a group of claims;

(f) means for forming a derivative claim section by combining the converted graphical and textual elements of the converted claim dependency and text of claims in the order obtained after the step (iii) of interchanging, and associating thereof with a computer program providing a user interactive selection of a subset of elements in one of the graphical and textual forms, and displaying said subset in the selected form along with the related subset of elements according to the transformed claim dependency in the other form to a user, the elements in the graphical form being displayed in the order obtained after the step (iii) of interchanging; and

(g) means for forming the derivative document by combining the derivative claim section with the patent document or a part of the patent document.